The Royal
Australian and
New Zealand
College of
Radiologists

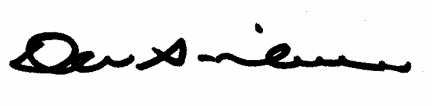
SUBMISSION TO THE PRODUCTIVITY COMMISSION
IMPACT OF ADVANCES IN MEDICAL TECHNOLGY ON HEALTHCARE EXPENDITURE

The Royal Australian and New Zealand College of Radiologists (RANZCR) is the leading professional organisation for the promotion of the science and practice of the medical specialties of Radiology and Medical Imaging (Diagnostic and Interventional) and Radiation Oncology in Australia and New Zealand.

The College appreciates the opportunity to provide input to the Commission's study on the impact of advances in medical technology on healthcare expenditure and apologises for the delay in making this submission. The College acknowledges, however, the challenge for the Productivity Commission in undertaking such a complex study and feels somewhat limited in its capacity to make a worthwhile contribution. The College proposes therefore to make some very broad comments about systemic issues it considers need to be borne in mind in undertaking any assessment of the impact of advances in medical technology over the past ten years or so and to focus more on providing the Commission with material aimed at providing the Commission with an insight into the future of diagnostic imaging and into future healthcare technologies.

The College would also welcome an opportunity to comment further when the draft report becomes available at the end of March 2005.

Yours sincerely



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General comments on systemic issues related to the study's terms of reference

There are a number of systemic issues that have distorted the real impact of advances in diagnostic imaging technology on healthcare expenditures:

- The use of both technology assessment and licensing to control the diffusion of new technology in Australia

  Chapter 12 The Technology-Health Expenditure Link, A Perspective from the Ageing-Related Diseases Study of the OECD publication "A Disease-based Comparison of Health Systems – ISBN 92-64-09981-6, OECD 2003 provides an excellent summary of the literature and the issues involved in assessing the relationship between technological change and health expenditures, including discussion about the issue of controlling technological change in order to control rising health expenditures.

  In the case of technology assessment, the Medical Services Advisory Committee (MSAC) process presents particular difficulties, due in part to the high cost of imaging equipment, in terms of obtaining the levels of evidence or outcome measures required to demonstrate their efficacy and cost-effectiveness. Given the growth in new diagnostic and therapeutic techniques and devices, the MSAC process and the associated delays have also conspired to delay the introduction of new technologies and new applications of current technologies onto the publicly funded Medicare Benefits Schedule (MBS). For example, the Blandford Report on MRI recommended in March 2000 that MSAC "review as an immediate priority, accompanied by supporting evidence gathered as part of the Review" Magnetic Resonance Cholangiopancreatography (MRCP) and several other clinical applications. MRCP is currently being assessed for the second time by MSAC, almost five years later.

  The regulated access to publicly funded MRI through specialist referral and limited licenses complicates assessment of the impact of both MRI and CT technologies as it creates a structural impediment to effective technology transfer from CT to MRI. The Government's recent decision to cut MRI MBS rebates by approximately 15% in order to fund further limited expansion of MRI will further distort efforts to assess the impact of that modality. It is estimated that some 40% of the currently installed MRI units are not eligible for MBS rebates, with the utilisation of these units that derives from clinical indications not included on the MBS (eg MRCP), non-specialist referrals (eg GP, sports medicine practitioners) and patient convenience not being captured by any health expenditure information systems. There is no evidence to support the contentions of the Government, apparently based on its perception of the impact of the diffusion of CT, that a proliferation of MRI units would result in an unaffordable increase in healthcare expenditure. Analyses reported in the OECD publication referred to above, suggest that while Australia may have more CT units per head of population, the per capita health expenditure was similar or in fact lower than many other OECD countries. Australia is still lagging other countries in access to MRI technology, technology that is widely accepted now as a standard, safer, component of diagnostic imaging services for an increasing range of clinical applications.

- Inappropriate utilisation of imaging

  In 1991 the Government introduced various control mechanisms to effect an "arms length" referral arrangement in the provision of diagnostic imaging services under Medicare, with the intention of limiting inappropriate servicing. This arrangement does not apply to services provided by specialty groups working within their specialty areas except for those in the specialty of diagnostic radiology. These arrangements do not prevent inappropriate utilisation of imaging technology. There is evidence internationally that non-radiologists performing their own imaging are two to seven times more likely to order imaging procedures than treating physicians with no stake in the radiology practice to which they are referring. The issue of inappropriate imaging use, including over-utilisation by self referring non diagnostic imaging specialists, ignorance and defensive medicine, is complex. It is a cost to the health system as well as a quality and patient safety issue.

  The College has been progressing a quality agenda for many years through a range of initiatives including the development of Imaging Guidelines and a Quality and Accreditation Program for medical imaging practices in Australia.

  The fifth edition of Imaging Guidelines is currently being developed in electronic format. It will update the evidence base for more than one hundred guidelines, organised according to body system and based predominantly on presenting symptoms. The new guidelines, as with earlier editions, will serve as a succinct guide for referrers on the most appropriate imaging for common clinical problems and will be distributed to all general practitioners, medical students and overseas trained doctors admitted by the Australian Medical Council. More recently, under the auspices of the Radiology Quality and Outlays Memorandum of Understanding (MoU), the College has initiated the adoption of a long term, strategic and systematic approach that expands on the College's existing activities and commitment to quality improvement through the establishment of a Quality Use of Diagnostic Imaging Program (QUDI) Program. Under this Program the College will be looking to identify processes and protocols for dissemination of imaging guidelines that facilitate best practice referrals for imaging, including exploring the potential to integrate imaging guidelines into decision support systems for referring practitioners. It will also be developing strategies to address consumer awareness and expectations of current and new imaging technologies.

  The ultimate aim of the College's Quality and Accreditation Program is the development of minimum standards of accreditation for all modalities of medical imaging, including diagnostic radiology, interventional radiology, diagnostic mammography, computed tomography, ultrasound, nuclear medicine and magnetic resonance imaging. A voluntary accreditation scheme, jointly administered by RANZCR and the National Association of Testing Authorities (NATA), commenced in May 2004, and is open to all diagnostic imaging providers that wish to apply. Under the Radiology MoU a mandatory accreditation scheme is proposed to commence in November 2005, for all practices that fall within the scope of the MoU. As limited professional / technical resources will result in some practices not being able to be accredited before the introduction of the mandatory scheme, transitional arrangements will be necessary.

- Inadequate information systems

  The literature suggests that data on health expenditure by disease and comprehensive measures of outcomes are needed to enable a better understanding of how health technology influences health expenditure. Health technology definitional issues aside, the different funding jurisdictions in Australia and the limitations of their associated expenditure based information systems, particularly in respect of health outcomes, will be a constraint for the Commission in this study. The imaging items in the Diagnostic Imaging Services Table of the MBS are, for example, structured according to clinical indications within the various modalities, not by body system or presenting symptoms. Nor is the structure of the MBS consistent with the College's imaging guidelines which, as mentioned above, are organised by body system.

  Further, the whole system of MBS fees has been distorted by successive governments through capped budgets, cost neutrality requirements, private health insurance, patient affordability and more recently the new safety net arrangements, making it very difficult to analyse the relationships between the various drivers of demand and actual health expenditures. It is also unlikely that productivity gains that ought to be accruing within the total health system as a result of very significant advances in imaging technology over the past decade, eg through earlier and more accurate diagnoses, reduced surgical procedures, shorter hospitalisation, etc could be quantified, if in fact they were even being realised, due to the structural limitations and inadequacies of the health information systems generally.

Future Directions in Imaging and Medical Technology

We have enclosed two documents; one on the future of diagnostic imaging, the other on future healthcare technologies, that have been made available to the College for this purpose by a College Fellow. You will note that the documents are marked "Confidential". The documents are subject to copyright and in complying with the terms of their availability to the members of the organisation responsible for their publication they are being made available to you to assist your understanding of the future directions in imaging and medical technology and we request that you do not disclose the information directly to any other party.

In addition you may find the following documents, copies of which are also enclosed, relevant and of interest to the Commission's study:

1. *Forecasting the Future of Radiology at RSNA*, ASRT Scanner, January 2004, Volume 36, No 4 ©
2. *Magnetic Resonance in Medicine in 2020*, by Robert A. Bell PhD, December 2004, www.ImagingEconomics.com
3. Multislice CT: A Revolution in the Making?, by Fergus V. Coakley MD, Benjamin M. Yeh MD, April 2002, www.ImagingEconomics.com